



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/981,476 | 10/17/2001 | Timothy James Collins | IND10254 | 6045 |

22917 7590 05/24/2005

MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER

HARVEY, DIONNE

ART UNIT PAPER NUMBER

2643

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,476

Applicant(s)

COLLINS ET AL.

Examiner

Dionne N. Harvey

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/2/04
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1 and 3-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Steeves (US 6,570,487)** in view of **Meier (US 5,294,931)**.

Regarding claim 1, the claimed method is inherently taught by the apparatus of Steeves, which comprises: In **figure 2**, Steeves teaches an antenna **204** for receiving and transmitting a signal, which reads on "receiving a carrier signal"; In **column 7, lines 40-42**, Steeves teaches that while in low-power standby state, tags continuously monitor the RF environment for an activation signal from the reader, which reads on "continuously monitoring the carrier signal..."; In **figure 3**, Steeves teaches a flowchart for illustrating the transmission of information between a tag and reader wherein monitoring of said carrier signal comprises determining whether a first predetermined condition has been met i.e., "is the request relevant?", and whether a second condition has been met i.e., "more packets?", reading on "...for a first predetermined condition and a second predetermined condition"; If the first condition is met, that is, if the request is relevant to the tag, Steeves teaches at **308-311** in the flow chart of **figure 3**, that a channel is chosen, thus reading on "if a first predetermined condition is satisfied, choosing a channel and continuously transmitting data"; and then the tag

Art Unit: 2643

transmits data until the second condition is met, that being that no more packets are needed, thus reading on "[transmits data] until the first predetermined condition is not satisfied or until the second predetermined condition is satisfied"

Steeves does not teach that the first predetermined condition and second conditions are based upon the detected power level of the carrier signal.

Meier teaches a means for identifying transponders, which are well known in the art, and which are often incorporated into Tag devices for inventory/storage purposes.

In **column 2, lines 30-68**, Meier teaches that a plurality of transponders may be individually constructed so as to respond only when the power level of a received signal falls within a predetermined range. Thereby teaching that the predetermined conditions for response is based upon the received power level of the sent carrier signal.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Steeves and Meier, incorporating Meier's method of selectively activating transponders in tags, for the purpose of limiting the number of simultaneously produced answer signals during an interrogation.

Regarding claim 3, in Meier's discussion of "Transponder 1", while the power level of the interrogation pulse exceeds the lower power level threshold, i.e. the first predetermined condition is satisfied, it also exceeds the upper power level threshold, i.e., the second predetermined condition is also satisfied. Therefore "Transponder 1" does not transmit data.

Regarding claim 4, in **column 8, lines 63-68**, Steeves teaches that the tag will not transmit data if it is determined that the RF environment is very crowded. In which

Art Unit: 2643

case, determination of a crowded RF environment reads on "the second predetermined condition is satisfied".

Regarding claim 5, In **column 7, lines 55-67**, Steeves teaches that the nature of the request of relevancy to the tag or tag grouping will vary, for example one request may be for tags corresponding to "fresh food crates". Steeves therefore teaches that the predetermined conditions are random.

Regarding claim 6, In **figure 2**, Steeves teaches at least a first device **151** comprising: a receiver **203** for receiving a carrier signal; in **column 7, lines 40-42**; Steeves teaches that the device monitors the RF environment for an activation signal, thereby teaching "a monitor, coupled to the receiver, for continually monitoring the carrier signal"; in **column 7, lines 58-64**, Steeves teaches that upon receipt of a request from the reader, each device *makes a determination* as to whether the request is relevant to the particular tag and if relevant, the tag *assembles a packet of data* for transmission, which reads on "a storage medium having data stored therein"; In **figure 3**, Steeves teaches a flowchart for illustrating the transmission of information between a tag and reader wherein monitoring of said carrier signal comprises determining whether a first predetermined condition has been met i.e., "is the request relevant?", and whether a second condition has been met i.e., "more packets?", reading on "...for a first predetermined condition and a second predetermined condition"; If the first condition is met, that is, if the request is relevant to the tag, Steeves teaches at **308-311** in the flow chart of **figure 3**, that a channel is chosen, thus reading on "if a first predetermined condition is satisfied, choosing a channel and continuously transmitting data"; and then

Art Unit: 2643

the tag transmits data until the second condition is met, that being that no more packets are needed, thus reading on “[transmits data] until the first predetermined condition is not satisfied or until the second predetermined condition is satisfied”

Steeves does not teach that the first predetermined condition and second conditions are based upon the detected power level of the carrier signal.

Meier teaches a means for identifying transponders, which are well known in the art, and which are often incorporated into Tag devices for inventory/storage purposes. In **column 2, lines 30-68**, Meier teaches that a plurality of transponders, which may be individually constructed so as to respond only when the power level of a received signal falls within a predetermined range. Thereby teaching that the predetermined conditions for response is based upon the received power level of the sent carrier signal.

Regarding claim 7, in **column 7, lines 55-56 and lines 64-65**, Steeves teaches that the reader transmits a request to a single tag, to a subset of tags, or to any tag within range...the request may be for all tags corresponding..., which reads on “wherein the first and second conditions of a first device are the same as the first and second conditions of a second device.

Regarding claims 8,10 and 13, In **claim 1, line 3-6**, Meier teaches “...only those transponders which have stored an amount of voltage which falls within their predetermined window, respond”. Therefore, in the situation where at least two transponders have identical response windows, Meier teaches that “the first and second devices transmit simultaneously.”

Regarding claim 9, Steeves further teaches that in given grouping of activated tags, one or more tags may not correspond to the request for relevancy, thereby reading on “the first and second conditions of a first device are different than the first and second conditions of a second device.

Regarding claim 11, In **column 7, lines 55-67**, Steeves teaches that the nature of the request of relevancy to the tag or tag grouping will vary i.e., not all tags may correspond to “fresh food crates”. Steeves therefore teaches that at least one of the first and second conditions are randomly assigned.

Regarding claim 12, Steeves teaches that more than one device may correspond to the relevancy request, i.e., more than one tag may correspond to “fresh food crates”, therefore in the case where tag devices corresponding to a particular category are “uniformly” stored, Steeves then teaches that “the second condition is uniformly distributed.”

Regarding claim 13, In **claim 1, line 3-6**, Meier teaches “...only those transponders which have stored an amount of voltage which falls within their predetermined window, respond”, thereby reading on “wherein the second condition is satisfied when a power level exceeds a threshold.”

Response to Arguments

2. Applicant's arguments filed 12/2/2004 have been fully considered but they are not persuasive.

With regard to the Applicant's argument that: **Steeves Fails To Teach That The Predetermined Conditions Are Based Upon Power Level Thresholds:**

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With regard to the Applicant's argument that: **Meier Uses A Plused Carrier Which Turns Off Before Tag Data Transmission Begins And Therefore Fails To Teach "Continuously Monitoring The Carrier Signal".**

The Meier reference is not relied upon for providing the teachings of "continuously monitoring of the carrier signal". Instead, the Examiner has provided in the detailed rejection, above, her interpretation of the Steeves reference and how Steeves continues to anticipate the claimed limitations.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dionne Harvey


CURTIS KUNTZ
SENIOR PATENT EXAMINER
EBC CENTER 2600